

## **Linking Science and Prevention Programs – The Need for Comprehensive Strategies**

Past experiences in planning, implementing, and evaluating efforts to stem the U.S. epidemic have clearly shown that preventing HIV infection depends on two equally important factors – studying and implementing biomedical interventions to thwart the virus, and influencing millions of individuals in diverse populations to adopt or maintain safe behaviors. **Comprehensive, sustained prevention activities offer the best hope for slowing the epidemic's spread.**

### **Local Solutions to Local Problems**

In the United States, as elsewhere, the AIDS epidemic is composed of diverse multiple sub-epidemics that vary by region and community. The foundation of all CDC's HIV prevention programs is that those closest to the problem, equipped with needed information and tools, are best able to solve it.

Recognizing that unique local situations require unique local solutions, in 1993 CDC completely revamped its approach to HIV prevention activities. In December of that year, CDC issued HIV Prevention Community Planning guidance to all state, territorial, and local health departments receiving HIV prevention funds. The guidance required that health departments share responsibility for identifying high-priority HIV prevention needs with representatives of communities for whom prevention services are intended. HIV Prevention Community Planning also embraces the notion that behavioral, epidemiologic, and social sciences must act synergistically in the development, implementation, and evaluation of HIV prevention programs within a community.

To help guide program development, CDC provides guidance through the HIV Prevention Community Planning process on what approaches have been effective, as well as how programs may need to adapt to the evolving epidemic.

***Essential Elements of Comprehensive Programs.*** Comprehensive programs should be based on several key principles and include a number of essential activities. These are highlighted below.

- **A community planning process** to ensure efforts are directed to communities at greatest risk
- **Epidemiologic and behavioral surveillance** to effectively guide prevention efforts

- **Voluntary HIV counseling, testing, referral, and partner counseling** to provide a pathway to needed prevention and treatment services
- **Health education and risk-reduction activities**, including individual-, group-, and community-level programs to provide the skills and support necessary for reducing risks
- **Accessible diagnosis and treatment of other sexually transmitted diseases** to decrease risk of HIV transmission
- **School-based prevention efforts for youth** to provide young people the skills and support they need to keep from initiating risky behaviors and to adopt healthy ones
- **Public information programs** to ensure that knowledge and awareness of how to prevent HIV remain high
- **Training and quality assurance** to provide those implementing programs needed skills
- **Laboratory support** to keep pace with diagnostic and testing services and related research efforts
- **HIV prevention capacity-building activities** to support organizations in expanding their abilities to implement effective programs
- **An HIV prevention technical assistance assessment and plan** to ensure that programs keep pace with prevention technologies
- **Evaluation of major program activities, interventions, and services** to ensure efforts are effective

## **Guiding Principles**

### ***Access to Voluntary HIV Counseling, Testing, and Partner Counseling Is Critical***

*Voluntary HIV testing* is an important part of comprehensive HIV prevention programs. However, testing alone will not result in behavior change, nor will it prevent transmission – sexual, drug-related, or perinatal. To have a chance of preventing HIV transmission and ensuring that necessary services and care are provided to infected individuals, the focus of HIV testing must be on counseling. Voluntary, rather than mandatory, HIV testing is recommended because it fosters the development of trust between patients and health care providers. A trusting atmosphere facilitates better understanding of what the test means for patients, their partners, and their families and helps ensure that they are linked to needed services and care.

*Anonymous HIV testing* should be available to increase options for individuals seeking to learn their HIV status. In this age of effective treatment, it is increasingly important for people to know their HIV status. Recent studies show that eliminating the availability of anonymous HIV testing services has a deterrent effect on some people's willingness to come forward for testing. People with legitimate concerns about discrimination or people who are unfamiliar with or distrust the public health system are able to gain access to the system through anonymous testing and subsequently receive referrals for needed treatment, care, or prevention services. Partner counseling also can be provided following anonymous testing, if requested.

*Partner counseling.* CDC considers voluntary, confidential notification of potentially exposed partners to be an essential component of a comprehensive HIV prevention program. Partner counseling is a primary prevention service with the following objectives:

- To provide prevention information to people who are at very high risk of becoming HIV infected, but who may be unaware of or misunderstand their risks
- To assist these individuals in obtaining HIV prevention counseling and voluntary testing, and referral
- To provide access to partners who are already infected to prevention and treatment services that can improve their health and quality of life

Partner counseling services can be provided in both anonymous and confidential testing sites. For areas lacking the resources to perform partner counseling services themselves, CDC recommends they provide the necessary training to conduct these services for physicians or hospitals that provide HIV counseling and testing.

### ***Reaching HIV-Infected Individuals and Linking Them with Care and Treatment Services Is a Priority***

The availability of effective drug therapies makes it more important than ever for HIV-infected persons to know their serostatus. Early recognition of their infection allows patients to consider treatment options that will keep them healthy longer and protect the quality of their lives. It also allows them to take steps to prevent transmitting the virus to others.

### ***Comprehensive Efforts Are Needed for Reducing Sexual Risk Behaviors***

In all prevention activities, CDC supports the incorporation of prevention messages and programs that strongly emphasize that young people should postpone sexual activity, and that sexually active adults should maintain a monogamous relationship with an uninfected partner. However, some young people and adults will still engage in sexual intercourse that puts them at risk for HIV and other sexually transmitted diseases (STDs). To ensure these individuals acquire the knowledge and skills necessary to protect themselves from HIV, CDC also supports prevention messages and programs that encourage consistent and correct use of latex condoms among those who are sexually active. Research has conclusively shown that latex condoms are

highly effective barriers to HIV and many other sexually transmitted diseases when used consistently and correctly.

*Condom availability as a prevention strategy.* Individuals in some populations, especially sexually active young people, may experience problems accessing condoms because of several factors, including cost, convenience, and embarrassment. For these individuals, the fact that condoms are not readily accessible may be a significant barrier to consistent use. To eliminate this barrier, many local communities actively support programs that make condoms available to populations most vulnerable to HIV infection, including sexually active young people. Research shows that providing access to condoms can increase their use among some sexually active young people. And, despite some fears to the contrary, research clearly demonstrates that young people who participate in comprehensive HIV prevention programs that include access to condoms are no more likely to initiate or increase sexual activity than other young people.

No single approach by itself – prevention counseling and health education, abstinence promotion, condom education, condom availability, STD treatment – can eliminate HIV. Each affected community can best determine which combination of approaches will be most appropriate and effective for preventing HIV infection under local circumstances.

### ***Comprehensive Efforts Are Needed for Reducing Drug-related Behaviors***

Preventing the spread of HIV through injection drug use requires a wide range of approaches, including programs to prevent initiation of drug use, to provide high quality substance abuse treatment options to drug users, to provide outreach services to drug users and their sex partners, to provide prevention services in jails and prisons, and to educate those at risk about preventive options. Prevention messages for drug users also must address the risks of sexual transmission.

Substance abuse prevention and treatment programs are the key to slowing the spread of HIV in this population, and efforts in this area must be increased and strengthened nationwide. To further minimize the risk of HIV transmission, IDUs who continue to inject must have access to interventions that can help them protect their health. They must be advised to always use sterile injection equipment; warned never to reuse needles, syringes, and other injection equipment; and told that using syringes that have been cleaned with bleach or other disinfectant is not as safe as using new, sterile syringes. Drug users not only need access to this information, but also the skills and support necessary for them to adopt and maintain safer behaviors.

*Increasing syringe availability as a prevention strategy.* To reduce the risk of HIV transmission through needle sharing, prevention strategies for IDUs who continue to inject drugs have included various approaches to increasing the availability of sterile syringes. In some communities, drug paraphernalia laws have been modified to exclude syringes, syringe prescription laws have been repealed, and pharmacy regulations and practice guidelines restricting the sale of sterile syringes have been changed. In other communities, needle exchange programs have been established and are contributing to reductions in HIV transmission among

drug users without encouraging the use of illegal drugs. Needle exchange programs should also provide drug users with risk-reduction education and referrals to drug counseling and treatment and other medical services.

Having access to sterile injection equipment is important, but it is not enough. Better integration of all prevention and treatment services, including for STDs and substance abuse, is critically needed.

### ***Comprehensive Programs for Youth Are Essential***

*School-based programs.* It is estimated that half of new HIV infections in the United States – about 40,000 annually – are among people younger than 25. Prevention activities and interventions that begin well before young adulthood are desperately needed to stem this tide. To that end, CDC supports comprehensive school-based HIV prevention programs. CDC does not endorse any specific curriculum, but recommends that the scope and content of school health programs be locally determined and consistent with parental and community values. At the same time, CDC has identified curricula that have credible evidence of reducing health risk behaviors among youth and provides resources to ensure that the interventions, including training, are available for those who want to use them.

*Programs for out-of-school youth.* Many youth at very high HIV risk, such as homeless or runaway youth, juvenile offenders, or school drop-outs, can only be reached through intensive community-based programs. Integrating HIV prevention programs with ongoing community efforts to provide shelter, medical care, or other services to out-of-school youth is essential.

### ***Improved Prevention Programs in Correctional Facilities Are Needed***

Correctional facilities are critical settings for monitoring the cutting edge of the HIV/AIDS epidemic and for addressing the problem of elevated rates of TB, STDs, hepatitis, and other infectious diseases. Inmate populations probably represent the largest concentration of persons infected with, or at high risk for, HIV due to drug use and unsafe sexual behaviors. Furthermore, short stays and high recidivism rates result in a substantial number of high-risk individuals who circulate between correctional facilities and their communities – most often, communities that are already beset by poverty, drug use, violence, and disease. It is imperative that correctional facilities offer effective programs for disease screening, treatment, and prevention.

Correctional facilities offer significant opportunities for intervention. Their controlled settings allow efficient access to inmates for the delivery of prevention programs. However, the opportunity to provide comprehensive education and prevention programs in prison, jails, and juvenile facilities, has been missed to a great extent. CDC is working to improve community health through improved access to HIV, STD, and TB health care and prevention services within correctional settings and transitional programs in communities.

### ***Continued Efforts Are Needed for Reducing Occupational Risks of Health Care Workers***

Physicians and many other health-related workers, such as nurses, physicians' assistants, phlebotomists, emergency first responders, and funeral services providers, are involved with procedures that might expose them to HIV. Some procedures are higher risk than others, but there is a theoretical risk of transmission whenever there is the potential for infected blood to come into contact with another person's blood or mucous membranes.

*The use of universal precautions.* Current recommendations for protecting health care workers and their patients from these exposures use "universal precautions," as recommended by CDC's Hospital Infection Control Practices Advisory Committee. Under universal precautions, blood and body fluids (except sweat) of all patients are considered to pose a potential infectious hazard, and appropriate precautions are recommended for all health care personnel (not just physicians) to prevent contact with these fluids.

*Safer medical devices.* In addition, safer medical devices have been developed that will further reduce the risk of exposure to HIV and other infectious agents. Needle-less IV systems and "safety" needles are helping to further reduce transmission risks, and safer disposal containers are now available to prevent needle sticks or cuts when disposing of used medical devices.

*Postexposure therapy.* While the best protection clearly is to prevent HIV exposure, studies have found that administering antiretroviral therapy immediately following an exposure may reduce the risk of the worker developing HIV infection. CDC recently issued guidelines for the management of health care worker exposures to HIV and recommendations for postexposure therapy (PET). These guidelines outline a number of considerations in determining whether a health care worker should undergo PET and, if so, which regimen.

### **Confidentiality Must Remain Paramount**

Confidentiality is one of the foundations of CDC programs, and it must be a requirement under any program enacted. Breaking trust with individuals and communities is highly detrimental to HIV prevention programs and can lead to illegal discrimination. It is essential that confidentiality protections be included as a provision of any HIV-related prevention activity.

### **Sound Public Health Policy Must Be the Goal**

Sound public health practice should be carefully considered in all policy and program discussions about HIV prevention and treatment programs. Decisions about implementing new or revised policies on either the state or national level must consider the public health implications of proposed policies. Program designers and policy makers must ensure that the approaches undertaken will be the most effective in reducing HIV transmission and saving lives.

Today's new medical treatments, while showing great success in keeping many HIV-infected people healthy longer, are still not working for everyone, often have serious side effects, are extremely expensive, and may be lulling people into a false sense of complacency about the need to keep themselves safe. Newer and even better treatments for HIV disease are anticipated and welcomed. In the meantime, we already know that ***prevention works***. Preventing HIV infection must remain a high global priority, today and well into the next millennium.